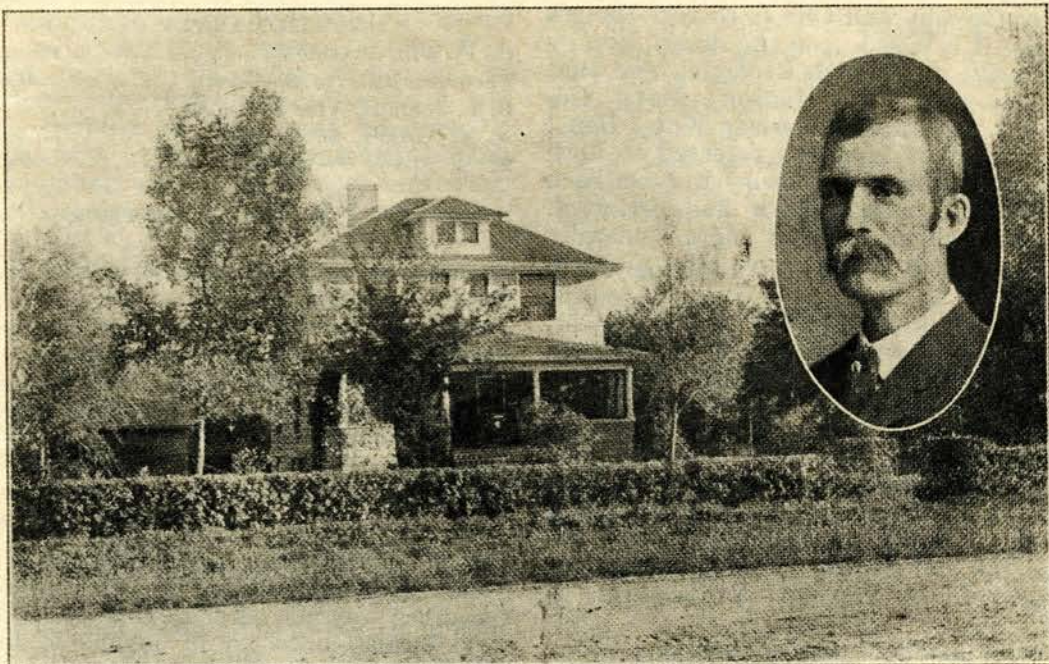


NORTH AND SOUTH DAKOTA HORTICULTURE

OCTOBER 1936



MR. GEORGE H. WHITING AND HIS FORMER HOME AT YANKTON, S. DAK.



THE CAROLINA RAIL



O. A. Stevens

Practically every year during the migration period, someone brings to me a dead or injured bird about the size of a Hungarian partridge, a brownish bird with rather long stout legs. The back and wings are mostly olive-brown with black streaks. The head and neck are more gray or blue gray with some black next the yellow bill. The under parts are lighter with brown bars on the sides. The tail is short and soft. The legs suggest a wading bird but the long toes have no webs at the sides.

This is our best known species of its family with the exception of the coot. The name rail may seem to need some explanation, but there is little to offer further than that it is a very old name, similar forms of which are found in the older languages of Europe. The name Carolina Rail may suggest that it was one of those species described by Catesby and this is correct though the books say it is based upon the description by George Edwards, an English Geologist, and that his specimens were from Hudson's Bay. Edwards called it "the Little American Water Hen." As a matter of fact Linnaeus referred to both Edwards and Catesby and it seems to have been Catesby's common name which has persisted. Another name which is even more generally used is Sora which is said to have been a native name.

The Sora is one of those birds which is common, yet seldom seen excepting by accident or by careful search in the proper manner. They are birds which live among the tall reeds and rushes of the pond and lake shores. From the shore of a marshy pond one is certain to hear their characteristic call which has been described as a "whinny," a series of rapid notes dropping from a high to a low pitch. Many other peculiar notes rise out of the marsh, perhaps reminding one of the answer of Nokomis to Hiawatha:

"Talking in their native language,
Talking, scolding at each other."

If one watches patiently in an opening along the muddy shore, he will probably see the Sora slipping out from behind some reeds and walking or running across the opening. Or, coming upon them suddenly, they rise and fly heavily for a short distance to drop again into the cover.

Their nests are made of coarse grasses, lined with finer ones, placed either on the ground or a few inches above the shallow water. Mr. A. C. Bent, writing of nests found in North Dakota

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and adjacent Canada some thirty years ago says: "They were sometimes found in meadows where the grass was not very tall, but more often they were better concealed in clumps of bulrushes." The eggs are usually ten or twelve in number, sometimes as many as eighteen. They are buffy with brown spots, about an inch and a quarter in length. The young are covered with a black down when hatched and are able to swim at once.

The Soras feed upon snails, water insects and other small water animals. In early fall they turn vegetarians and feast upon seeds of wild rice and other marsh plants. Especially in the

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NORTH DAKOTA STATE HORTICULTURAL SOCIETY NEWS LETTER



A. F. Yeager,
Secretary,
Fargo, N. D.

From apricots produced on the experimental plots this summer we made some very excellent preserves. At least, that was the verdict of those who tasted them. Twelve selections were made from the trees which we intend propagating next year for trial.

In the grape breeding plots we have several very good tasting white grapes, half of whose ancestry is our wild native grape. Hence, we hope that they may have sufficient hardi-

ness to stand the climate.

Each year for many years we have received samples of *Solanum triflorum* berries asking whether they were edible. Botanists have classed them as poisonous. However, we fed them to rabbits with no fatal results and finally this year when a good sized batch came in we decided to make a cooking test. Miss Berrigan, Experiment Station Home Economist, prepared preserves and sauce from them. Three of us sampled the products and while there was no apparent poisonous effects the cooked fruit had a decidedly unpleasant taste and produced a burning sensation in the throat for many hours after the sampling was done. Hence, while they may not be poisonous they certainly are not to be recommended as a preserving fruit.

Often we are puzzled as to what to plant in the garden late in the summer. When a small patch of onions was irrigated this year we decided to try out a few things as a fall crop. Planted on July 9th, Golden Gem sweet corn has been usable for some days at this writing (September 16th), beets are ready to use, and unless we get extremely heavy freezes turnips look like they might make a crop though they are not of edible size as yet.

According to work done at the Minnesota Experiment Station the difference between so-called acid tomatoes and the mild flavored ones lies not in the amount of acid, but in the amount of other substances. The mild flavored tomatoes have sugar and other things present which mask the acid flavor. This probably accounts for fruit left to ripen thoroly on the vine having a sweet taste compared to that picked green and ripened inside.

According to the New York Experiment Station the popping quality of pop corn is entirely independent of its germinating ability. Fourteen year old pop corn popped as well as that not so old, even though it did not germinate.

According to the Department of Commerce the

following commercial vegetable acreages were harvested in North Dakota in 1934: string beans 99 acres, cabbage 185 acres, sweet corn 160 acres, tomatoes 75 acres, watermelon 53 acres, other vegetables (excluding potatoes) 536 acres. Cass and Williams counties were the two leading ones.

One of the North Dakota seed companies sold 200 pounds of Bison tomato seed in 1936.

According to the Morden, Manitoba, Experiment Station, woody plants are best procured from nurseries in the fall and heeled in until spring. They recommend heeling them in in a well drained place and covering with a foot of soil.

In a good many cases Experiment Stations have found that applications of nitrate fertilizers in the fall are better than those made in the spring. Nitrogen is apparently taken into the plant during the winter months and is there ready to stimulate heavy vegetative growth when spring comes.

Our former president, M. O. Thompson of Lisbon, says that Chinese elms grown along the streets have suffered badly, in fact, most of them have died, while those planted in groves and permitted to develop a natural bushy form have survived. He thinks that the difference lies in the exposure of the trunk. Among the evergreens he reports Black Hills spruce as coming through in best condition.

One of our desirable shrub and hedge plants is *Cotoneaster acutefolia*. It is subject to one serious insect pest, the oyster shell scale. According to Mr. F. Gray Butcher, Extension Entomologist, the best control method for this pest is an oil spray used after the leaves are off in the fall or early in the spring before growth starts.

The following are the depth of planting directions for various kinds of lilies as sent out by the Morden Experimental Station:—"Six inches deep for amabile, bulbiform, cernuum, martagon lily, monadelphum or Caucasian lily, philadelphicum or Orangecup lily, tenuifolium or coral lily including the yellow variety Golden Gleam, and Skinners new philadauricum hybrids. Varieties to be set at about 8 inches depth include, canadense or Canada lily, concolor or Morningstar lily, elegans, Hansonii or Hanson lily which likes a shaded location, superbum or American Turkcap lily, all varieties of Tiger lily including the Double and Giant Tigers, Umbellatum or Western Orangecup lily, Scottiae and Miss Willmotts lily. At a depth of 10 inches goes croceum or Orange lily, dauricum or Candlestick lily, Davids lily, Henry lily, Maximowiczii or False Tiger lily and

(Continued on page 119)



PEONIES

Guy Nehr

I have taken it for granted that when you assigned the subject of Prize Peonies to me that you wanted to know how I have been able to grow Peonies that were good enough to take prizes at our annual flower show.

I believe the subject can best be covered by a few don'ts to start with, except in choosing the variety you want, and that is always a personal matter.

To commence with the don'ts, don't buy cheap roots. I believe the most important thing is to buy good roots. You are planting a root that will probably stay in one place for years. You can rightly expect to have hundreds of blossoms from the root you plant, so why skimp a few cents on the price of a root. For the past 4 or 5 years I have been digging up cheap roots that I have acquired one way and another and throwing them away. I buy only one or two each year, and each root thrown away is replaced with one of a good variety. I give each root 3 or 4 years to prove itself, and then if it fails to produce good blossoms its place is taken by a better root.

When it comes to planting, the chief don't is—don't plant too deep, and if you plant where a Peony has been before, throw away the dirt when you dig the hole and fill with fresh dirt. Most growers tell you to plant so top of eyes are two inches below surface levels. I have cut that down to an inch or an inch and one-half.

Three years ago I received 4 roots as prizes in the annual Peony show and I also purchased 4 more roots from the grower who donated the prizes. Every one of these roots had been planted too deep and the eyes were growing on top and along the stems that grow above ground. I planted each one of these roots 1 inch below the level of the ground and this year they began to have good blossoms on them as I had forced the eyes to come out lower on the fleshy part of the root and not on top and along the stems. Longfellow and Richard Carvel were two of these roots and they were especially good this year and I expect them to be better next year as the tops have made a good growth.

Don't plant where they will be in the shade. Peonies need the full sunshine, and don't plant close to trees and shrubs. They need lots of moisture and trees and shrubs are robbers. In beds plant them three feet apart, in borders two feet apart is enough. If you have them in your lawn be sure and cultivate around them at least two feet from the center. They don't do well close to the house because the cellar wall draws moisture away from them and the house reflects heat on them.

And don't fail to cultivate them from the time the first shoots appear in the spring until the middle of August. After they bloom they do not need to be cultivated as often. Keep the ground around them in a fine mulch so they can get air, and water when it does rain. If it doesn't rain give them a good soaking at least once a week. They need lots of water during July and August as that is the time your next years flowers are forming. If you want to fertilize your Peonies do it in the fall before the ground freezes. Stir up the ground around the plant and use two large handfuls to each plant, stirring it into the ground with a hoe or rake. Steamed bone meal is as good as anything and is the only kind I have ever used. Vigoro and wood ashes are also good fertilizers.

Peonies are not troubled much by diseases. Root rot is caused by the stems dying down into the crown of the root and this sometimes causes the root to rot. If what has been a good plant fails to grow or only sends up a few short weak stems the root has probably rotted. I have only had one case of this kind and when I dug it up last year the crown had entirely rotted away from the feeder roots. Leaf and stem blotch is caused by unfavorable weather. If you cut off all your tops in the fall after growth has stopped and burn them this fungus disease is easily kept under control.

In dry years dirt will drift in around the stems and will gradually make a mound over your roots. As your eyes are always found about 2 inches below ground this mound will cause the eyes to form closer to the top of the root. Take your rake and smooth this mound down to level ground in the early spring before there is any chance of injuring the new sprouts.

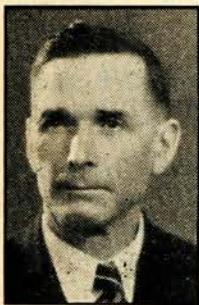
All reliable nurseries give the ratings of the American Peony Society on the roots they sell. 10 is perfect and the highest rated peony is Le Cygne with a rating of 9.9 per cent. It is a white and the only one I have ever seen was in Faribault, Minnesota a year ago. It was certainly a beauty and deserved its rating.

The next highest rated white is Kelways Glorious with 9.8 per cent with the old reliable Festiva Maxima closely following with 9.3 per cent. The highest rated red is Philip Revorie with 9.2 per cent with Longfellow next with 9 per cent. Most reds rate between 8 and 9 per cent as most of them have some objectionable fault that other colors do not have. The highest rated pink is Therese with 9.8 per cent with a large number of kinds closely following with ratings above 9 per cent. There are so many peonies at a fair price that it is a waste of time and money to buy a root with a rating below 8 per cent. The Grover Cleveland that Mr. Dybvig

(Continued on page 120)



PRESIDENT'S CORNER



F. X. Wallner
Sioux Falls, S. D.

To prevent loss by corn smut three things are recommended: rotate crops, or plant corn, wheat or oats on ground where there was no smut last year; 2nd, gather all smut balls and burn them before the black dust is formed; 3rd, treat seed with formalin or corrosive sublimate before planting. A stalk of corn when diseased is non-productive, therefore it is better to cut it out at once and haul it into the feed lot.

The PACKER acknowledges the receipt of a 116 lb. watermelon, grown at Hope, Ark. Last year the Chamber of Commerce sent to Hollywood the largest melon ever grown, 195 lbs., and the second largest melon sent out weighed 169½ lbs. The Hope Fruit Growers Association, each season ships hundreds of these extra large melons to all parts of the country for novelty purposes.

Three alleged manufacturers of maple syrup, in the east are being prosecuted by the Department of Agriculture. Their product, labelled "Genuine Maple Syrup," was analyzed and proved to be sugar syrup, with imitation maple flavoring costing less than 20 cents a gallon and sold for \$1.50 per gallon.

Willis Ocker, conqueror of Death Valley the past three years, drinks only orange juice and orange juice was fully half of all the food taken, during three unbelievable endurance tests. Walking bareheaded in the inferno of Death Valley, the lowest spot in America, with a sun temperature of 160 degrees, he crossed the Valley in 13 hours in 1934. Again in 1935 he crossed the 50 mile Valley in less than 13 hours with the sun temperature at 165 degrees. Starting July 4th, 1936, on a 1300 mile course that went down the Sacramento Valley, over the high Sierra Nevada mountains, then the full length of Death Valley and on over the great Mojave desert, he came out sun blistered and sore footed, 20 lbs. lighter, but strong and in good spirits.

First came the definite announcement that the steamship lines have reduced the freight rates on onions to the United Kingdom, from 80 cents to 50 cents per hundred pounds, then comes the rumor that the British Government had temporarily lifted the duty on onions from the United States. If true there will be many boat loads of western onions, also Michigan and eastern onions shipped across, as it seems there is a bigger crop than last year, in spite of the heat and drought. In Michigan they report an un-

usual situation, in that the bulk of the crop will run over 3 inches while in former years, only 10 to 25 per cent of the crop was large. Utah, Colorado, Idaho and Washington grow the large onions and could ship boat loads, any place on earth.

The potato crop shows big improvement all over the nation and it looks now as though potatoes will not be as scarce or high as we all thought, a few weeks back. A big grower in Oregon shipped the first car of netted gems to California. The netted gems in one Oregon potato district are in excellent condition; there are 1500 added acres this year. The Colorado crop is also better than last year. A new grade has been added, mostly coming from the west, U. S. Extra No. 1, which are required to be cleaner than No. 1; if classified as long they must run 6 to 10 ounces or more in weight; if classified as round they must run 2½ to 3 inches in diameter.

Mr. C. L. Fitch, secretary of the Iowa Vegetable Growers' Association tells of a 1500 mile potato tour in the northern states, as far north as Duluth and 60 miles along the north shore of Lake Superior, where the air is free from offensive pollen because the southwest winds blow across 30 miles of water. The most promising sorts are still the four I selected as outstanding two years ago, the Warba, Chippewa, Katahdin and No. 35-21. He tells that some of the men studied the job so hard and for such long hours that they got sick and had to return home. But he states that he was tough enough and prudent enough that he stood the trip fine, but he adds there was no skylarking on his part, nothing but business at any time. I recall at some of the conventions the speed of the Secretary, kept up at all times; it is no wonder that some of those heavy fellows gave up and returned home. Mr. C. L. Fitch's column in the weekly PACKER, "Potatoes and Other Truck Crops," is full of valuable information and is of great value to large or small growers of fruits and vegetables.

The annual meeting of the S. Dak. State Horticultural Society will be held at Clark, S. Dak., November 18th and 19th. This date was selected by the Executive Board, at the Fargo meeting. The weather will be more favorable at that time than in January and we should have a larger attendance at that time. We should also have better exhibits of fruit and vegetables at this earlier date. The ladies that were not at the summer meeting should read my "Last Call" in the August issue and make up their minds now to be at Clark and have a good time. As this town is near our northern border, we hope many of the North Dakota members will also be with us.



HORTICULTURAL GLEANINGS FROM CANADA

D. H. Scott

This year's meetings of the Great Plains Section of the American Society for Horticultural Science were held in Canada, August 10-13th, inclusive. The tour started at Estevan, Saskatchewan. Principal points of interest visited were at Indian Head, Saskatoon and Rosthern. Unofficially, many of us had the opportunity and pleasure of spending a few enjoyable hours at Frank Skinner's Dropmore Nursery and the Morden Experimental Station on the return trip. Occasional sidelights added amusement, such as the "10,000 bushel 1935 apple crop" at the Morden Experimental Station. In conversation with some gentleman at Estevan Mr. Leslie, Superintendent of the Morden Station, stated that 10,000 bushels of apples had been harvested. By the time the tour arrived at Saskatoon the figure had jumped to 100,000 bushels!

At the Indian Head Forest Nursery we saw various blocks of forest trees that had been planted a number of years ago. Of these, two were outstanding. The Finnish and Russian strains of Scotch pine were decidedly superior to the other Scotch pines. They are hardier, making more rapid growth and still retaining a symmetrical shape.

Chief raspberry is apparently hardier than Latham. Of the two new U. S. D. A. strawberries, Fairfax is hardier than Dorsett. At Edmonton, Alberta, Dr. Shoemaker is inclined to favor Fairfax because with him it seems to have a smoother, more uniform berry that is a little larger than Dorsett. Raspberries are dusted with sulphur in the heat of the day as a control measure for red spider.

Five kinds of trees are used in the Saskatchewan shelterbelts. These are White Spruce, Green Ash, Poplar, American Elm, and Caragana. They are normally spaced 4x4 feet, but experiments are being started at the University of Saskatchewan at Saskatoon to try to determine the best spacing distances. Spacings in these trials vary all the way from 12x12 feet to 2x4 feet.

An inspiring sight at Saskatoon is Dr. C. F. Patterson's 25 acre field of apple seedlings which were planted 7x1½ feet. Ninety-five thousand seedlings of controlled crosses were growing in this one field alone. Professor Alderman, Chief of the Division of Horticulture, University of Minnesota, voiced the sentiments of the group when he stated he felt sure that somewhere in that field was the apple which would be of outstanding service on the Great Plains in years to come. The job will be to find it.

To those of you who are interested in choke-

cherries, Dr. Patterson at Saskatoon has a good chokeless yellow chokecherry.

In a discussion of fruit breeding Professor Alderman reported that he had never been able to successfully cross sandcherry with sweet cherry or sour cherry. Perhaps, however, there might be differences in sandcherries so that one might be found that would cross.

By the time we were on our way back we thought we had learned a considerable amount of Great Plains horticulture, but when we arrived at Mr. Frank Skinner's Dropmore Nursery we found there was still much to be learned. One is surprised at the extensiveness of the work of this individual enterpriser. After being with him for a while one feels that here indeed is a very keenly capable naturalist. He is storing up many a future headache for plant classifiers by crossing widely separated species of plants. The dwarf Siberian almond, *Prunus nana*, enters many of his surprising combinations. In his rock garden, Mr. Skinner uses India ink on limestone chips as labels. These chips can be thrust unobtrusively into the soil right beside the plant. Those of you who know the *Daphne Cneorum* will be interested to know that Mr. Skinner has another species, *Daphne Mezereum*, which is a small, very good hardy plant for the rock garden. Incidentally, I might mention that *Daphne Cneorum* is hardy at Rosthern, approximately 50 miles north of Saskatoon, which is far enough north to make me feel like a Southerner. It was observed that *Potentilla fruticosa*, our native Shrubby Cinquefoil, is used much by the Canadians. Chinese Elm had been used extensively, but experience of the people up there is similar to ours down here in that many of the trees were killed out last winter. Some trees survived, particularly those that had been distributed by the Morden Experimental Station. Apparently the Morden Station has a hardy strain of the species. Professor Alderman says that the Andrews Nursery at Faribault, Minnesota, has a dwarf hedge form of Chinese Elm.

Pixwell gooseberry, a North Dakota product, was outstanding for hardiness throughout Saskatchewan. At Dr. Seager Wheeler's Rosthern Farm, Buttercup squash and Sunshine sweet corn are making a decided hit.

Many new and interesting things were observed at the Morden Experimental Farms, some of the more general being that Egyptian onion sets withstand drouth, as do the edible soybeans of which the Agate variety shows the most promise. Also, that *Princepia sinensis* seems to be the outstanding hedge plant. It is perfectly hardy, makes a dense compact growth, and is well fortified with needles so that it serves very fittingly for a barrier. Pembina plum looked

(Continued on page 115)

LILIES AND THEIR BEHAVIOR FROM SEED

Dr. Geo. L. Slate

Easy lilies

amabile¹
croceum¹
Backhouse hybrids²
Brocade²
Mrs. R. O. Backhouse²
Sutton Court²
bulbiferum¹
callosum¹
canadense²
candidum¹
concolor¹
concolor pulchellum¹
dauricum (dauricum) and its varieties¹
dauricum Batemanniae¹
Davidi¹
elegans and its varieties¹
formosanum¹
formosanum Prices variety¹
Grayi²
Hansoni²
Henryi¹
Maximowiczii¹
Maxwill¹
Priniceps¹
Priniceps Creelman¹
Priniceps Shelburne Hybrid¹
Priniceps Pride of Charlotte¹
regale¹
tenuifolium¹
tenuifolium Golden Gleam¹
superbum²
tigrinum¹
umbellatum¹
Willmottiae¹

Moderately easy lilies

Brownii¹
cernuum¹
Martagon and varieties²
Monadelphum and varieties²
pardalium²
pardalium giganteum²
pyrenaicum²
rubellum²
Sargentiae¹
speciosum and varieties²

Difficult lilies

auratum and varieties²
carolinianum²
chalcodonium²
cordifolium²
Duchartrei Wardii¹
Duchartrei Farveri¹

Have mosaic or will acquire it easily

giganteum²
japonicum²
Leichtlinii¹
centifolium¹
longiflorum¹
sulphureum¹
philadelphicum¹
Pacific Coast lilies¹
columbianum¹
Humboldtii¹
Parryi¹
Washingtonianum¹
Indian and S. Asiatic lilies¹
Nepalense¹
Neilgherrense¹
ochraceum¹

Subject to Botrytis

auratum¹
speciosum¹
tigrinum¹
Batemanniae¹
elegans¹
thunbergianum¹
umbellatum¹
Sargentiae¹
sulphureum¹
chalcodonium¹
Maximowiczii¹
japonicum¹

¹ Seeds come up first year after planting.
² Seeds come up second year after planting.

HORTICULTURAL CLEANINGS FROM CANADA

(Continued from page 114)

good, as did Haraldson No. 4. Dolgo crab seems to be the outstanding hardy crab, and according to Professor Alderman, it is outselling all others by a wide margin in Minnesota.
As a final item, those of you who like to label your plants with stakes driven into the ground will probably be interested to know that these stakes can be preserved very easily and inexpensively by soaking them in a solution of copper sulfate or bluestone.
Next year's meetings of the Great Plains Section will be held at Cheyenne, Wyoming.





SECRETARY'S CORNER

W. A. Simmons

This month's cover page will, I am sure, interest many of our older members who were privileged to know and meet Mr. Whiting at our annual gatherings. Possessed of a great fund of Horticultural information and able to express it in such clear and concise language that when taken down, just as uttered, not the smallest change was necessary in its printing, his talks were always one of the main features of our meetings. Now that he is living in Bayfield, Wis., we seldom see him any more but we old timers will always have a very warm place in our hearts for him. Life members, possessing a file of our old reports, will I am sure, derive keen pleasure in reading his articles, most of which are as apropos now as when written, years ago. Mr. Whiting is the oldest, in point of membership, living member of our Society, the only one of the organizers still living and was its second President, back in the "horse and buggy" days of 1889. That he will long be with us, is the hope of all of his friends.

On the evening of Sept. 16th, Mr. Wallner, Mr. Ostrowsky, Mr. Dybvig and ye editor visited the Dell Rapids Garden Club, a very live bunch that it is always a great pleasure to mingle with. Many of the members had brought some of their choice blossoms so that a very pretty little informal flower show, eventuated. The spoils of the evening, from my standpoint was the best paper on peonies I had heard in a long time, by Mr. Guy Nehr, which you will find and I am sure enjoy, on another page. Mr. Wallner took along some very fine tomatoes which he cut and I managed to eat most of them. One fine specimen of Golden Bison was among them and we searched it in vain, for seed. Mr. Wallner said he had pressed out dozens of them this year, without finding seed in any of them. If they are seedless to that degree everywhere, we will have to carry over some plants in our greenhouses and start them from slips, next year. It is certainly too good to be lost.

I take it for granted that most flower lovers now have the Regal lily adding its beauty to the July garden. It is so hardy and dependable that there is really no excuse for anyone being without it. There are two other dependable lilies that I think we should try next, the Princes and the Formosa lily, and I think these will be found equally easy to raise. The Princes resulted from a cross of the Sargentiae and the Regal, made by Miss Isabella Preston at Guelph, Ontario, Can., in 1916 and bloomed first in 1919. In describing it, Miss Preston says: "The flowers are wider open than those of either parent and the plant is a stronger grower than Regale and

is more floriferous than Sargentiae. The anthers are dark brown as in the Sargent lily, and it blooms 10 to 14 days later than Regal and a little earlier than the Sargent. Where it has been tried, it has proved to be as hardy and easy to grow as Regal. It seeds freely and as one would expect, the seedlings show some variation in time of bloom and shape and size of plant and flower. At Ottawa the seedlings grow very vigorously and bloom just as Regal is fading. The bulbs should be planted 12 inches deep."

The Formosa lily gives us another white, trumpet-shaped lily, just as the growing season is ending. The Price variety seems to be the one for us as it blooms earlier and is much shorter in stature than the one first introduced. It grows only about 2 feet high and blossoms in mid September. It is one of the quickest lilies to bloom from seed, often in nine months and is dependably hardy.

It is time our members were thinking of the annual meeting, which will be held at Clark, S. Dak., November 18th and 19th. As all roads will probably be open at that time, there is no excuse for anyone failing to attend, as there often was when the meetings were held in cold January. Those who will present papers are urged to send the titles of their papers to the Secretary as soon as possible, so there may be no delay in getting out the programs.

THE CAROLINA RAIL

(Continued from page 110)

southern states they have long been hunted as game birds. As a species they are widely distributed, nesting over most of the United States and Southern Canada. In winter they are found in the Gulf states, through the West Indies and in northern South America. When flying for short distances, the birds seem to do so with such difficulty that it often has been doubted that they were capable of making long flights. It is now conceded that on some frosty night in early fall they rise and depart southward in large numbers.

N. O. MONSERUD

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TREE SURGERY

CALL OR WRITE FOR APPOINTMENTS

Sota is about the last to ripen up for us. In fact some of the last we picked had been touched a little by frost before we had them all picked. The crop was very heavy on small trees, which were about eight feet tall and perhaps eight years old; getting about two bushels of fruit per tree. The Opata is inclined to be rather short lived, but live the longest where branches come from the ground level. The Waneta is another good annual bearer of very large plums when the trees are young, but as the trees get older the fruit tends to become smaller and smaller. The quality of the fruit is about average, but the skin is rather tough, not being nearly as tender as some of the other desirable varieties. I consider the Wastesa another valuable native variety for the Northwest. The fruit is flatish yellow, overlaid with some red and has practically a free stone. It ripens a little earlier than the Waneta and tends to drop its fruit all at once as soon as ripe. The Tecumseh I consider to be one of the best of the plum varieties and should be planted more than it has been in the past. It is a medium sized plum of good quality which ripens early in the season. It is a bright red plum, very attractive and finds a ready market. The Winnipeg plum is another good hardy variety which has borne regularly for us the past two or three years. The fruit is medium in size, bright red and oblong in shape. It ripens right after the Tecumseh.

The Kaga, Hanska, and Red Wing bore good crops this year for the first time in about four years. These are all high quality plums, probably superior to the regular bearers. The Kaga and Hanska, two very similar varieties, really cannot be beat on account of aromatic flavor, eating and cooking qualities. The Red Wing is a large flat plum, yellow overlaid with red and has a free stone.

Other varieties of plums which bore some fruit for us this year but which I do not consider as valuable for us on account of their lack of hardness or regularity of bearing were Omaha, Sapa, Nicolet, Zumbra, Oka, Underwood, Monitor, Loring Prize, Compass Cherry, Golden Rod, Tonka and Burwood. The three latter varieties bore for us for the first time this year and the Burwood variety if at all regular in its bearing habits is going to make a valuable plum. The tree grows tall and thrifty. The Tonka is a good quality plum but the trees this year bore a light crop of rather small fruit. The Golden Rod is a small clear yellow plum inclined to be rather small and soft when ripe.

The Nicolet, Zumbra, Monitor and Loring Prize are not worth planting, although the fruit has considerable merit. The trees either yield

As a whole we had very good success with

fruits last year; the best that we have had in several years. Many varieties of plums and apples bore for us that had not yielded any crops for four or five years. This was in spite of the fact that we had about a week of wet cold weather at about the time some varieties of plums were in full bloom. This no doubt cut down the yield considerably, however we had a fair stand with practically all varieties of plums that we have had established three or four years. Some varieties of apples that had been planted but three or four years failed to bloom, of course, as well as other varieties which are naturally slow coming into bearing and which are naturally sparse bearers. Our pear trees have failed to give us any fruit as yet. However we have some trees that are about old enough. Perhaps we will have an opportunity to sample some of our own pears in another year, as two or three trees bloomed a little this last year and even set a few pears which vanished somewhere some time during the summer. We had a good crop of cherries from two trees of Early Richmond and two of the Montmorency and succeeded in getting about half the crop away from our friends the Robins. We had an unusually heavy set of Latham raspberry, but had about a week of real hot weather which cut down the yield considerably. Currants and gooseberry bushes were loaded this year. The Perfection currant were so loaded that they decided to drop about half their crop when the berries were about half grown, but in spite of this they yielded us about 400 gallons of berries. We picked about 100 gallons of gooseberries but left a good many on the bushes. These varieties were mainly Houghton and Joeslyn, with some Carrie. We expect to replace these varieties eventually with Dr. Yeager's Pixwell. We are getting a good start with this latter variety and because of its long stems and heavy yielding will be much more profitable in picking than the other varieties. The robins also left us a few of John Robertson's Black Cap raspberry. I believe that all who have seen this wonderful seedling that John discovered on his place, will agree with me that it is the coming Black Raspberry for South Dakota and the Northwest.

Taking up first the varieties of plums which bore for us this year: The old dependable varieties that bear annual good crops have done themselves justice again. They include such varieties as DeSota, Opata, Waneta, Wastesa, Tecumseh and Winnipeg. I do not know as it is necessary to go into detailed description of these varieties, except to their reactions, briefly, in

RESULTS WITH NEW FRUITS IN 1935

E. A. Gates





poor crops or else lack adaptability to our climate. The Omaha, Sapa, Oka and Underwood are probably worth trying out but I do not believe it would be practical to plant these varieties in large numbers. The Omaha and Underwood because of their scarcity of bearing and the Sapa and Oka because of their lack of hardiness.

Our apple trees are rather young as yet and most of them have just come into bearing or just started to bear, so we cannot give an account of all the varieties that we have. The Anoka had its regular heavy crop of apples this year. While the fruit of the Anoka is rather inferior, it nevertheless, has considerable merit on account of its regularity and early bearing qualities. The Haraldson trees bore again this year. The tree bears when very young, about as soon as the Anoka, but not setting as many apples perhaps. We had one tree, set four years ago that had about three bushels of fruit this year. The fruit is large and red-striped, resembling the Wealthy somewhat in color. While not a high quality apple nevertheless it is excellent for cooking and keeps well throughout the winter. The tree is extremely hardy and seems to have no faults.

The following crabs bore for us this year: Whitney, Transcendent, Dolgo, Red Flesh and Hopa. The Dolgo is well worth growing in every orchard. While the crabs are rather small, they make excellent red jelly and are fine for pickling. The tree is upright and hardy and because of its attractive bloom in the spring and bright red crabs in the fall makes a very fine ornamental. The Red Flesh and Hopa crabs are more valuable as ornamentals than any commercial value of the fruit. They both have beautiful red blooms. The Hopa blooms a few days ahead of the Red Flesh. Many people stopped in our place last spring and inquired as to what these trees were, they were so attractive. The Red Flesh Crab grows about three times as large as the Hopa but are very similar in shape and color and both are red clear through. Both varieties make good jelly, but are a little woody for making good pickles.

The Sasha from Brookings and Sharon from Iowa State College, had some fruit for us this year for the first time. Both varieties of apples have high quality fruit and the trees appear to be hardy with us.

We had a few Golden Delicious this year from branches that had been top worked on the Hibernial. We have not found this variety hardy nor the Red Delicious when grown as a tree. The fruit does not grow very large with us but they give us more of a variety of a high quality fruit and an apple that will keep well along into the winter.

Other common varieties of apples which bore

for us this last summer were Yellow Transparent, Duchess, Wealthy, McIntosh, Lobo, Wagener and Hibernial.

I might mention our trials with some varieties of strawberries. We haven't given as much attention the past two or three years to new varieties as we did a few years ago and have discarded about nine out of every ten varieties that we have tried. The varieties that we have tried recently are Red Gold, Fairfax, Dorsett, Beaver, Bellmar, Golden Harvest and Blakemore. Of these the Golden Harvest has proven the best, followed by Beaver and Bellmar. The Golden Harvest strawberry is a high quality berry which stands up well on the market. It ripens about ten days later than the Sen. Dunlap. The plants are quite small but the berries retain their size well up toward the last of the picking. The Beaver ripens about the same time as Sen. Dunlap or a little later. The berries are large, roundish and of high quality. The plants are large and thrifty. The Bellmar is a medium sized berry, long and pointed, resembling the Premier and is a cross between the Premier and Dr. Burrell. It is a few days earlier than the Premier. We have discarded the Red Gold, Fairfax, Dorsett and Blakemore. Other varieties that we have tried in the past and discarded are Gibson, Cooper, Dr. Burrill, Gem Everbearing and others. This does not mean that some of these varieties will not do well with you. Some varieties seem to be more adapted to some sections than others. Their adaptability depending upon climate and soil. No doubt most of these varieties were very successful where they were originated. Aside from those mentioned we grow the Sen. Dunlap, Progressive Everbearing, Mastadon and Champion Everbearing, very successfully. The Dry Weather Everbearing strawberry of Dr. Yeager's, I believe is going to prove of value in our climate. It seems to stand true to its name, withstanding the dry weather and transplants readily. While not bearing as heavy as the Progressive, it has a larger more solid fruit.

The lead arsenic tolerance allowed by the Government is the equivalent of one pound of spray residue on 1,215,000 good sized apples, according to Professor O. C. Roberts of the Massachusetts Experiment Station. Also there is, according to Professor T. J. Talbert of the Missouri Experiment Station, about as much danger of lead poisoning from drinking 10 glasses of water a day as from eating one apple with the maximum lead residue of .019 grains per pound of fruit. Some day insecticides that are non-poisonous to man will supplant the deadly variety, but meanwhile there is no use getting panicky about the menace of lead arsenate.

—COUNTRY HOME.

Oct.
1936

HARDINESS OF FRUITS AT MANDAN

E. Pfeander

ered in the fall by the time the temperature falls to 15 to 20 degrees above zero. Lower temperatures than that without protection are likely to damage the roots." He also recommends that the mulch be removed early in the spring. I might add that we have found it desirable to take the mulch entirely out of the patch rather than put it between the rows for the reason that strawberry blossoms are sometimes killed by frost where the mulch is left between the rows, while with the ground bare the blossoms escape such damage.

PICKING, HANDLING AND PACKING FRUITS FOR MARKET is the title of special bulletin 169 of the University of Minnesota Agricultural Extension Division, St. Paul, Minn.

Unusual evergreens which are recommended by the Morden Experimental Station in sheltered locations are the Dwarf Japanese Yew and the Canada Yew. Another shrub which they recommend and which has done very well at Fargo is *Principia sinensis*. This shrub is the first one to leaf out in the spring. It is also very good for hedge purposes because of its dense growth and short sharp thorns.

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DYBVIQ NURSERIES

COLTON, S. DAK.

In crabs, Dolgo, Amur and Olga have come through unscathed, at this trying location. Incidentally, all three were originated many years ago by Prof. N. E. Hansen, plant specialist of South Dakota, but of the three, the Dolgo is the only variety commercially available at this time. Among the very hardiest plums under cultivation in Canada, we find Assiniboine heading the list, with Cree, Winnipeg and Pembina following a close second. Mr. Boughen in Manitoba reports Pembina as one of the finest quality plums grown in that district, yet trees of neither Winnipeg nor Pembina are available in the States at this time. Ojibwa, another extremely hardy kind, Cree and Assiniboine are, fortunately, available in limited quantities in the U. S.

In cherry hybrids we find Opata bearing crops clear up to the Rosthern, Sask., district, with Oka and Tom Thumb doing almost as well. Originating in South Dakota years ago, all three varieties are commercially available to planters. From the Minn. fruit breeding station come many new kinds of plums, apples, gooseberries, strawberries and currants but except in favorable locations or sheltered spots, are not quite hardy in our coldest districts excepting the new Red Lake Currant, which, introduced a few years ago, has proven to be harder than anything offered heretofore.

NORTH DAKOTA NEWS LETTER

(Continued from page 111)

Skinner's hybrid, Maxwell. The Regal and Speciosum bulbs should have a depth of 12 inches and some growers place them on their side in gravel."

Asparagus seed may be gathered from the old plants if they are still standing in the field. If the fruits are crushed it is possible to wash out the pulp and thus secure practically clean seed. Spring planted seed will give fine plants which will be big enough to set out the spring following. R. H. Roberts of the Wisconsin Experiment Station says, "A strawberry bed should be cov-



PEONIES

(Continued from page 112)

showed at our June show rates 8.2 per cent and that is good for a red.

Right now is the best time to plant peonies. The Grover Cleveland is the only one that I am planting this fall and it will take the place of a cheap root that I do not even know the name of and has never had a good bloom in four years.

We all have our favorites. Mine is Sarah Bernhardt for pink, Philip Revorie for red and Festiva Maxima for white. They are good every year for me, and some peonies do not come good every year. For example, Solange is a beautiful flower that can be called either a pink or white, but conditions must be just right for it to produce good blooms and that happens about once in 3 or 4 years.

I have 42 plants divided into 12 pinks, 11 reds, 9 whites and one yellow. 18 of them rate 9 per cent or better, 14 8 per cent or better, 3 below 8 per cent and one that I do not know the rating of.

In 1935 my Festiva Maxima was rated the best single blossom in our show, but if you remember I had stripped off all the leaves but one on the stem, and not knowing it was my blossom Mr. Keene asked me what idiot did that. So after raising a good blossom be sure that it is prepared right if you want to exhibit it.

Red and pink should always be picked in the bud, to show their true color, either for exhibition or for house bouquets. This year my Avalanche was rated the best single bloom in the show. You pay out good money, make your choice, work hard and if everything is favorable you have some wonderful flowers and feel well repaid. If the season is all wrong and everything goes against you, you say, "I'm through, I quit, never again for me," but you will be right out there next year working harder than ever. The garden bug has got you and will never let go. To sum it all up in a few words, good roots, good dirt with lots of water and backaches, will bring you prize peonies.

Smithsonian Institute in Washington has been conducting a feather counting experiment for the past several months. The results are amazing, according to Dr. Alex. Wetmore. In the winter, Chickadees have an average of 1700 feathers; in the summer 1400. Goldfinches lose 500 feathers between winter and summer.

—Gib. Swanson in CAPPER'S FARMER.

The new Brooks, which is really a pure sand-cherry selected from thousands of seedlings, has been pronounced by a trained observer to be the largest sand fruit cherry he has seen. Plants were distributed to commercial growers last year

and will probably be available this season to any one interested. It was discovered at Brooks, Alberta, Canada, two years ago.

—E. Pfeander, in SUCCESSFUL FARMING

A dozen black locust trees planted in 1925 by Thomas R. Black of Zanesville, Ohio, have multiplied into a dense thicket which not only anchors down an acre and a half of steep hillside, but provides the owner with a self perpetuating source of profit. Although Mr. Black has no exact record of sales of fence posts from the grove, one lot brought him \$100 in 1933, and other sales have been made from time to time. The locusts grow so thick now that quail and pheasants hide there and it harbors a large population of song birds.

A 1000 bushel onion club is being sponsored by R. G. East, Agri'l. Agent for the Pennsylvania in Michigan counties served by that line. Any-one that can grow 1000 bushels of U. S. No. 1 onions on an acre is eligible, and will be awarded a gold medal. Any movement to foster better farming has our support but we trust that Mr. East won't organize any garlic clubs.

—COUNTRY HOME.

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